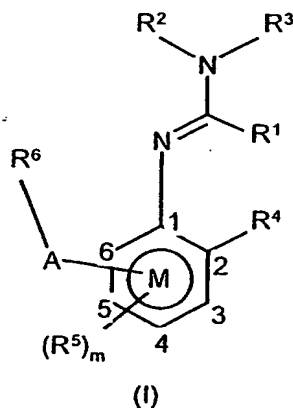


**Claims****1. Fungicide composition comprising:**

A) an arylamidine derivative of formula (I):



wherein:

- R<sup>1</sup> is an alkyl, an alkenyl, an alkynyl, a carbocyclic or heterocyclic monovalent group, it being possible for each of these groups to be substituted, or hydrogen
- R<sup>2</sup> and R<sup>3</sup>, which may be identical or different, are any one of the groups defined for R<sup>1</sup>; a cyano; an acyl; -OR<sup>a</sup> or -SR<sup>a</sup>, with R<sup>a</sup> corresponding to an alkyl, an alkenyl, an alkynyl, a carbocyclic or heterocyclic monovalent group, it being possible for each of these groups to be substituted, or R<sup>2</sup> and R<sup>3</sup>, or R<sup>2</sup> and R<sup>1</sup> may form together and with the atoms linking them, a ring which may be substituted;
- R<sup>4</sup> is an alkyl, an alkenyl, an alkynyl, a carbocyclic or heterocyclic monovalent group, it being possible for each of these groups to be substituted, a hydroxyl group; mercapto; azido; nitro; halo; cyano; optionally substituted acyl, amino; cyanato; thiocyanato; -SF<sub>5</sub>; -OR<sup>a</sup>; -SR<sup>a</sup> or -Si(R<sup>a</sup>)<sub>3</sub>;
- m = 0 to 3;
- the optional R<sup>5</sup> group or the optional R<sup>5</sup> groups, which may be mutually identical or different, have the same definition as that given above for R<sup>4</sup>;
- R<sup>6</sup> is optionally substituted with a carbocyclic monovalent group; and
- A is a direct bond, -O-, -S(O)<sub>n</sub>-, -NR<sup>9</sup>-, -CR<sup>7</sup>=CR<sup>7</sup>-, -C≡C-, -A<sup>1</sup>-, -A<sup>1</sup>-A<sup>1</sup>-, -O-(A<sup>1</sup>)<sub>k</sub>-O-, -O-(A<sup>1</sup>)<sub>k</sub>-, -A<sup>3</sup>-, -A<sup>4</sup>-, -A<sup>1</sup>O-, -A<sup>1</sup>S(O)<sub>n</sub>-, -A<sup>2</sup>-, -OA<sup>2</sup>-, -NR<sup>9</sup>A<sup>2</sup>-, -OA<sup>2</sup>-A<sup>1</sup>-,

$-\text{OA}^2-\text{C}(\text{R}^7)=\text{C}(\text{R}^8)-$ ,  $-\text{S}(\text{O})_n\text{A}^1-$ ,  $-\text{A}^1-\text{A}^4-$ ,  $-\text{A}^1-\text{A}^4-\text{C}(\text{R}^8)=\text{N}-\text{N}=\text{CR}^8-$ ,  $-\text{A}^1-\text{A}^4-\text{C}(\text{R}^8)=\text{N}-\text{X}^2-\text{X}^3-$ ,  $-\text{A}^1-\text{A}^4-\text{A}^3-$ ,  $-\text{A}^1-\text{A}^4-\text{N}(\text{R}^9)-$ ,  $-\text{A}^1-\text{A}^4-\text{X}-\text{CH}_2-$ ,  $-\text{A}^1-\text{A}^4-\text{A}^1-$ ,  $-\text{A}^1-\text{A}^4-\text{CH}_2\text{X}-$ ,  $-\text{A}^1-\text{A}^4-\text{C}(\text{R}^8)=\text{N}-\text{X}^2-\text{X}^3-\text{X}^1-$ ,  $-\text{A}^1-\text{X}-\text{C}(\text{R}^8)=\text{N}-$ ,  $-\text{A}^1-\text{X}-\text{C}(\text{R}^8)=\text{N}-\text{N}=\text{CR}^8-$ ,  $-\text{A}^1-\text{X}-\text{C}(\text{R}^8)=\text{N}-\text{N}(\text{R}^9)-$ ,  $-\text{A}^1-\text{X}-\text{A}-\text{X}^1-$ ,  $-\text{A}^1-\text{O}-\text{A}^3-$ ,  $-\text{A}^1-\text{O}-\text{C}(\text{R}^7)=\text{C}(\text{R}^8)-$ ,  $-\text{A}^1-\text{O}-\text{N}(\text{R}^9)-\text{A}^2-\text{N}(\text{R}^9)-$ ,  $-\text{A}^1-\text{O}-\text{N}(\text{R}^9)-\text{A}^2-$ ,  $-\text{A}^1-\text{N}(\text{R}^9)-\text{A}^2-\text{N}(\text{R}^9)-$ ,  $-\text{A}^1-\text{N}(\text{R}^9)-\text{A}^2-$ ,  $-\text{A}^1-\text{N}(\text{R}^9)-\text{N}=\text{C}(\text{R}^8)-$ ,  $-\text{A}^3-\text{A}^1-$ ,  $-\text{A}^4-\text{A}^3-$ ,  $-\text{A}^2-\text{NR}^9-$ ,  $-\text{A}^1-\text{A}^2-\text{X}^1-$ ,  $-\text{A}^1-\text{A}^1-\text{A}^2-\text{X}^1-$ ,  $-\text{O}-\text{A}^2-\text{N}(\text{R}^9)-\text{A}^2-$ ,  $-\text{CR}^7=\text{CR}^7-\text{A}^2-\text{X}^1-$ ,  $-\text{C}\equiv\text{C}-\text{A}^2-\text{X}^1-$ ,  $-\text{N}=\text{C}(\text{R}^8)-\text{A}^2-\text{X}^1-$ ,  $-\text{C}(\text{R}^8)=\text{N}-\text{N}=\text{C}(\text{R}^8)-$ ,  $-\text{C}(\text{R}^8)=\text{N}-\text{N}(\text{R}^9)-$ ,  $-(\text{CH}_2)_2-\text{O}-\text{N}=\text{C}(\text{R}^8)-$  or  $-\text{X}-\text{A}^2-\text{N}(\text{R}^9)-$  with

$n = 0, 1$  or  $2$ ,

$k = 1$  to  $9$ ,

$\text{A}^1 = -\text{CHR}^7-$ ,

$\text{A}^2 = -\text{C}(=\text{X})-$ ,

$\text{A}^3 = -\text{C}(\text{R}^8)=\text{N}-\text{O}-$ ,

$\text{A}^4 = -\text{O}-\text{N}=\text{C}(\text{R}^8)-$ ,

$\text{X} = \text{O}$  or  $\text{S}$ ,

$\text{X}^1 = \text{O}$ ,  $\text{S}$ ,  $\text{NR}^9$  or a direct bond,

$\text{X}^2 = \text{O}$ ,  $\text{NR}^9$  or a direct bond,

$\text{X}^3 = \text{hydrogen}$ ,  $-\text{C}(=\text{O})-$ ,  $-\text{SO}_2-$  or a direct bond,

- $\text{R}^7$ , which are mutually identical or different, each correspond to an optionally substituted alkyl, to a cycloalkyl or a phenyl, it being possible for each of these groups to be substituted, hydrogen, a halogen, a cyano, or an acyl;
- $\text{R}^8$ , which are mutually identical or different, each correspond to an alkyl, an alkenyl, an alkynyl, an alkoxy, an alkylthio, it being possible for each of these groups to be substituted, a carbocyclic or heterocyclic monovalent group which may be optionally substituted, or hydrogen;
- $\text{R}^9$ , which are mutually identical or different, each correspond to an optionally substituted alkyl, to a monovalent carbocyclic or heterocyclic group which may be optionally substituted, or to an acyl; or two  $\text{R}^9$  groups may form together, and with the atoms linking them, a 5-7-membered ring;

- the group represented on the right side of the bond A is linked to R<sup>6</sup>; or -A-R<sup>6</sup> and R<sup>5</sup> form together with the benzene ring M, a system of optionally substituted condensed rings;
- and the optional optical and/or geometric isomers, the tautomers and the addition salts with an acid or a base, which are agriculturally acceptable, of these derivatives of formula (I); and mixtures thereof; and

B) a fungicide compound selected from actinovate; aldimorph; andoprism; boscalid; capsamycin; carvone; clozylacon; cyflufenamid; diclomezine; Flumorph; fluoxastrobin; iodocarb; irumamycin; metrafenone; mildiomyacin; myclobutanil; oryastrobin; oxolinic acid; oxpoconazole; oxyfenthiin; paclobutrazol; penthiopyrad; picobenzamid; propanosine-sodium; proquinazid; prothioconazole; pyrrolnitrine; GY-81 also known as sodium tetrathio-(peroxocarbonate); tecloftalam; tiadinil; tricyclamide; uniconazole; cis-1-(4-chlorophenyl)-2-(1H-1,2,4-triazole-1-yl)-cycloheptanol; N-(3-ethyl-3,5,5-trimethyl-cyclohexyl)-3-formylamino-2-hydroxy-benzamide; N-(6-methoxy-3-pyridinyl)-cyclopropanecarboxamide; N-butyl-8-(1,1-dimethylethyl)-1-oxaspiro[4.5]decan-3-amine; methyl 1-(2,3-dihydro-2,2-dimethyl-1H-inden-1-yl)-1H-imidazole-5-carboxylate; methyl 2-[[[cyclopropyl[(4-methoxyphenyl) imino]methyl]thio]methyl]-.alpha.-(methoxymethylene)-benzeneacetate; methyl 2-[2-[3-(4-chlorophenyl)-1-methylallylideneaminooxymethyl]-phenyl]-3-methoxy-acrylate; (2S)-N-[2-[4-[[3-(4-chlorophenyl)-2-propynyl]oxy]-3-methoxyphenyl]ethyl]-3-methyl-2-[(methylsulfonyl)-amino]-butanamide; 1-(1-naphthalenyl)-1H-pyrrole-2,5-dione; 2,3,5,6-tetrachloro-4-(methylsulfonyl)-pyridine; 2,4-dihydro-5-methoxy-2-methyl-4-[[[1-[3-(trifluoromethyl)-phenyl]-ethylidene]-amino]-oxy]-methyl]-phenyl]-3H-1,2,3-triazol-3-one; 2-amino-4-methyl-N-phenyl-5-thiazolecarboxamide; 2-chloro-N-(2,3-dihydro-1,1,3-trimethyl-1H-inden-4-yl)-3-pyridinecarboxamide; 3,4,5-trichloro-2,6-pyridinedicarbonitrile; 3-[(3-bromo-6-fluoro-2-methyl-1H-indol-1-yl)sulfonyl]-N,N-dimethyl-1H-1,2,4-triazole-1-sulfonamide, and mixtures thereof.

2. Composition according to claim 1 comprising a compound (A) of formula (I) wherein:

- R<sup>1</sup> is an alkyl, an alkenyl or an alkynyl, it being possible for each of these groups to be substituted with an alkoxy, a haloalkoxy, an alkylthiol, halogen or a phenyl optionally substituted with an alkyl, with a haloalkyl, with an alkoxy, with a haloalkoxy, with an alkylthiol or with a halogen, or hydrogen;
- R<sup>2</sup> and R<sup>3</sup> which may be identical or different and which have the same definition as that given above for R<sup>1</sup> or which correspond to an alkoxy, an alkoxyalkyl, a benzyloxy, a cyano or an alkylcarbonyl;

- $R^4$  is an alkyl, an alkenyl or an alkynyl, it being possible for each of these groups to be substituted with alkoxy, a haloalkoxy, an alkylthiol, halogen or a phenyl optionally substituted with an alkyl, with a haloalkyl, with an alkoxy, with a haloalkoxy, with an alkylthiol or with a halogen; a hydroxyl; an halogen; a cyano; an acyl (preferably:  $-C(=O)R^C$ ,  $-C(=S)R^C$  or  $-S(O)_pR^C$ , with  $R^C$  corresponding to an alkyl, a haloalkyl, alkoxy, haloalkoxy, alkylthiol, an amine, a monoalkylamine, a dialkylamine or a phenyl optionally substituted with an alkyl, with a haloalkyl, with an alkoxy, with a haloalkoxy, or with an alkylthiol;
- $m = 0$  or  $1$ ;
- when it is present,  $R^5$  is a group having the same definition as that given above for  $R^4$ ;
- $A$  is a direct bond,  $-O-$ ,  $-S-$ ,  $-NR^9-$ ,  $-CHR^7-$  or  $-O-CHR^7-$ ,
- with  $R^9$ , when it is present, corresponding to an alkyl, an alkenyl or an alkynyl, it being possible for each of these groups to be substituted with an alkoxy, a haloalkoxy, an alkylthiol, halogen or a phenyl optionally substituted with an alkyl, with a haloalkyl, with an alkoxy, with a haloalkoxy, with an alkylthiol or with a halogen, or corresponds to hydrogen;
- and  $R^7$  has the same definition as that given above for  $R^9$  or represents a hydroxyl; a halogen; a cyano; an acyl; alkoxy; a haloalkoxy or an alkylthiol;
- $A$  is linked to the 4-position of the benzyl ring  $M$ ; and
- $R^6$  is a phenyl or an aromatic heterocycle, optionally substituted with one or more substituents, which may be identical or different, and which may be selected from the following list: hydroxyl; halogen; cyano; acyl (preferably  $-C(=O)R^C$ ,  $-C(=S)R^C$  or  $-S(O)_pR^C$ , with  $R^C =$  alkyl, haloalkyl, alkoxy, haloalkoxy, alkylthiol or phenyl optionally substituted with an alkyl, haloalkyl, alkoxy, haloalkoxy or alkylthiol); amine; alkylamine; dialkylamine; alkyl, haloalkyl,  $R^aO$ -alkyl, acyloxyalkyl, cyanoxyalkyl, alkoxy; haloalkoxy; alkylthiol; cycloalkyl (preferably cyclohexyl or cyclopentyl) optionally substituted with an alkyl, a haloalkyl, an alkoxy, a haloalkoxy or with an alkylthiol; and benzyl optionally substituted with an alkyl, a haloalkyl, an alkoxy, a haloalkoxy or with an alkylthiol.

3. Composition according to claims 1 or 2 comprising a compound (A) of formula (I) wherein:

- $R^1 = H$
- $R^2 = C1-C6$  alkyl;

- $R^3$  = C1-C6 alkyl;
- $R^4$  = C1-C6 alkyl;
- $R^5$  = C1-C6 alkyl and  $R^5$  is linked to the carbon at C5 of the benzyl ring M, with  $m = 1$ ;
- 5     • A is linked to the carbon at C4 of the benzyl ring M and represents -O-;
- $R^6$  = aryl optionally substituted with at least one alkyl and/or with at least one halogen.

4. Composition according to claim 3 comprising a compound (A) of formula (I) wherein:

- 10     •  $R^2$  = methyl;
- $R^3$  = ethyl;
- $R^4$  = methyl;
- $R^5$  = methyl and  $R^5$  is linked to the carbon at C5 of the benzyl ring M, with  $m = 1$ ;
- $R^6$  = benzyl substituted with at least one alkyl and/or with at least one halogen.

15     5. Composition according to claims 1 to 4 wherein compound (A) is *N*-ethyl-*N*-methyl-*N*'-[4-(chloro-3-trifluoromethylphenoxy)-2,5-xylyl]-formamidine or and *N*-ethyl-*N*-methyl-*N*'-[4-(fluoro-3-trifluoromethylphenoxy)-2,5-xylyl]-formamidine and the possible tautomers and addition salts with an acid or a base, which are agriculturally acceptable.

20     6. Composition according to claims 1 to 5 wherein compound (B) is prothioconazole.

7. Composition according to claims 1 to 5 wherein compound (B) is fluoxastrobin.

25     8. Composition according to claims 1 to 5 wherein compound (A) is *N*-ethyl-*N*-methyl-*N*'-[4-(chloro-3-trifluoromethylphenoxy)-2,5-xylyl]-formamidine and compound (B) is fluoxastrobin or prothioconazole.

30     9. Composition according to claims 1 to 8 wherein the weight ratio between compound (A) and compound (B) is  $0.001 \leq A/B \leq 500$ .

10. Composition according to claim 9 wherein the weight ratio is  $0.01 \leq A/B \leq 10$ .

35     11. Composition according to claim 8 wherein the weight ratio between compound (A) and compound (B) is  $0.05 \leq A/B \leq 5$ .

12. Method for controlling phytopathogenic fungi of crops, characterized in that an agronomically effective and substantially non-phytotoxic quantity of a fungicide composition according to claims 1 to 11 is applied to the soil where plants grow or are capable of growing, to the leaves and/or the fruit of plants or to the seeds of plants.

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13. Method according to claim 12 wherein the dose of compound (A) and of compound (B) is from 1g/ha to 2,000g/ha.

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14. Method according to claim 13 wherein the dose of compound (A) and of compound (B) is from 5g/ha to 700g/ha.

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15. Method according to claims 12 to 14 for protecting cereal crops (wheat, barley, maize, rice) and vegetable crops (haricot bean, onion, cucurbitaceae, cabbage, potato, tomato, sweet pepper, cabbage, pea, lettuce, celery, chicory), fruit crops (strawberry plants, raspberry plants), tree crops (apple trees, pear trees, cherry trees, ginseng, lemon trees, coconut palms, pecan trees, cacao trees, walnut trees, rubber trees, olive trees, poplars, banana trees), grapevine, sunflower, beetroot, tobacco and ornamental crops, lucerne, soyabean, market garden crops, turf, wood or horticultural plants.

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16. Method according to claims 12 to 15 for controlling cereal diseases selected from powdery mildew, Septoria diseases and brown rust.